

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Facilitating the Provision of Spectrum-)	
Based Services and Promoting)	WT Docket No. 02-381
Opportunities for Rural Telephone)	
Companies To Provide Spectrum-)	
Based Services)	
)	

COMMENTS OF ITRON, INC.

Itron, Inc. ("Itron"), by its attorneys, respectfully submits these Comments in response to Notice of Inquiry ("NOI") issued in the above-captioned proceeding.¹ Itron is concerned that the higher output power levels contemplated in the NOI for unlicensed devices operating in rural areas could expose automatic meter reading ("AMR") systems and other Part 15 devices to harmful interference. Tens of millions of AMR devices already are deployed and operating in the unlicensed 902-928 MHz band.²

The combined use of high output powers and unlimited duty cycles by services and devices in the already congested 902-928 MHz band would be detrimental to incumbent unlicensed operators like Itron and its utility customers, who have deployed AMR systems in both rural and urban areas. Thus, Itron asks the Commission to retain its existing rules for unlicensed operations in the 902-928 MHz band and to refrain from

¹ See *In re Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services*, Notice of Inquiry, WT Docket No. 02-381, FCC 02-325 (rel. Dec. 20, 2002) ("NOI").

² See NOI at ¶29.

allowing high power services and devices to enter the band and risk harmful interference to existing users.

Itron is the nation's leading manufacturer and supplier of AMR technologies using unlicensed Part 15 devices that operate in the 902-928 MHz band. Itron supplies its RF-based AMR systems to electric, gas, and water utility companies nationwide, including many that operate in rural areas. Itron's AMR systems enable a utility to monitor business and residential meters from a remote location using a hybrid architecture that employs both licensed and unlicensed frequencies. On the unlicensed side, utility consumption information is transmitted from meter modules via unlicensed Part 15 devices operating in the 902-928 MHz band. To date, Itron has shipped more than 20 million meter modules to more than 850 utility companies providing service in both rural and urban areas. Collectively Itron's utility customers have invested over \$1 billion in their AMR networks.

The Commission has sought comment on the extent to which unlicensed spectrum is being used to provide wireless service to rural communities and whether unlicensed devices should be permitted to employ higher output power in such rural areas.³ Itron and its public utility customers provide valuable wireless services to rural communities. These services promote efficiency and safety in the utility industry by reducing the costs of meter reading for utilities and eliminating the need for utility workers to enter customers' premises. Itron is concerned, therefore, that any increase in the output power of unlicensed devices operating in rural areas with no restrictions on duty cycles would pose a significant risk of increased interference to existing AMR users in the 902-928 MHz band, as well as other Part 15 operators in the band.⁴

³ See *id.*

⁴ The 902-928 MHz band currently is shared by, among others: (1) licensees in the Location and Monitoring Service ("LMS"); (2) government radiolocation systems; (3) industrial, scientific, and medical equipment operators; and (4) amateur radio operators. Part 15 stations operate on a secondary basis.

Regardless of how the Commission chooses to define rural areas,⁵ the potential for interference to AMR systems will remain, because, even under the strictest definition of such areas proposed in the NOI, virtually all of the utilities using AMR equipment would be deemed to be serving rural areas.⁶ Moreover, these utilities serve almost every person living in those rural areas.

Thus, the potential for harmful interference to AMR systems from services and devices operating with high output power levels in the 902-928 MHz band would not be “negligible,” as the Commission envisions,⁷ but widespread, affecting nearly every rural community in the country. The potential for interference would be worse still if new unlicensed services or devices required a constant duty cycle, rendering existing AMR systems virtually useless.

⁵ The Commission also has sought comment on the definition of “rural areas” that should be used to implement Sections 309(j)(3) and 309(j)(5) of the Act. *See NOI* at ¶15.

⁶ *See id.*

⁷ *NOI* at ¶29.

Itron urges the Commission to refrain from allowing high-powered technologies to enter the heavily used 902-928 MHz band to the detriment of existing. High-powered operations could crowd out AMR operators and place tens of millions of Part 15 devices at risk of harmful interference.

Respectfully submitted,

ITRON, INC.

A handwritten signature in black ink that reads "Henry Goldberg". The signature is written in a cursive style with a large, stylized "H" and "G".

By: _____
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